


Voluntary Carbon Market
Emergent Ventures International Pte Ltd


Development of Voluntary Carbon Market in the World
A TGO Seminar on Development of Voluntary Markets in Thailand



Voluntary Carbon Market - Facets

- What? Why? Where?
- Composition – Volume and Value
- Growth pattern
- Market Cycle
- Market Standards
- Project types
- Comparison of Standards

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Carbon Markets

International Carbon Market

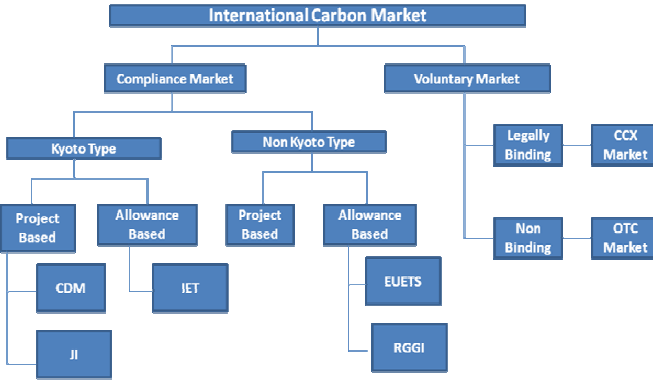
Compliance/
Regulatory
structure

Voluntary
Structure

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Carbon Market Structure

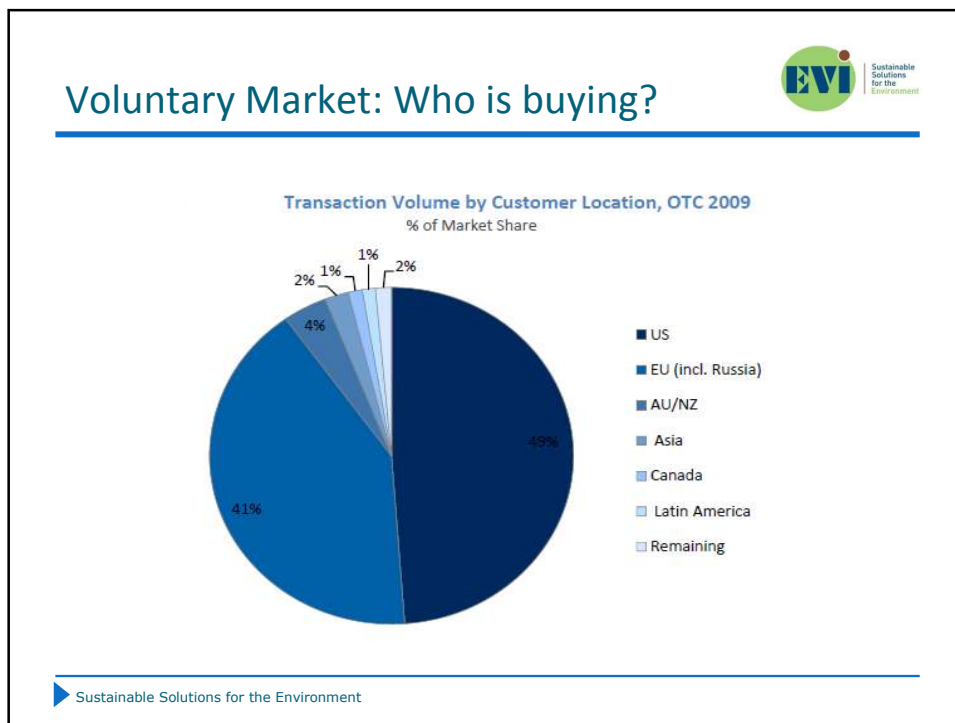
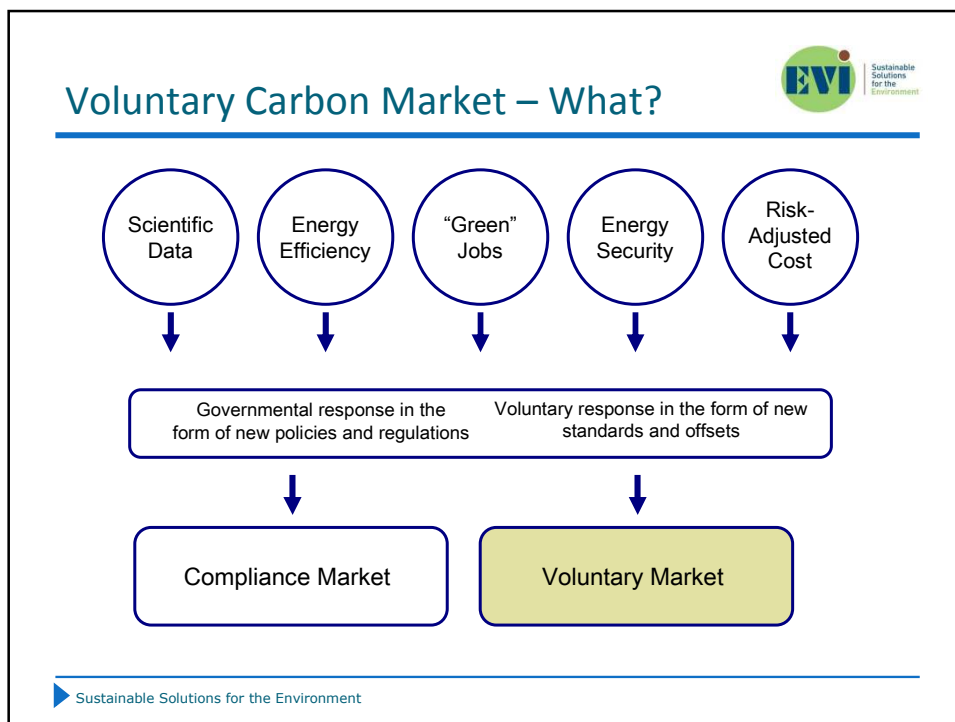


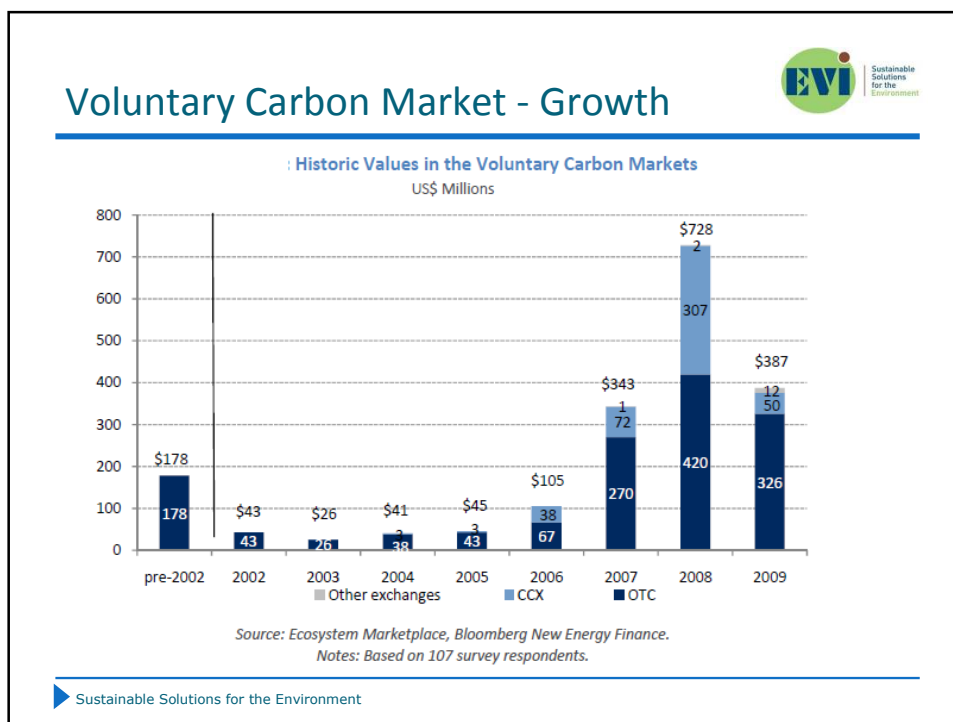
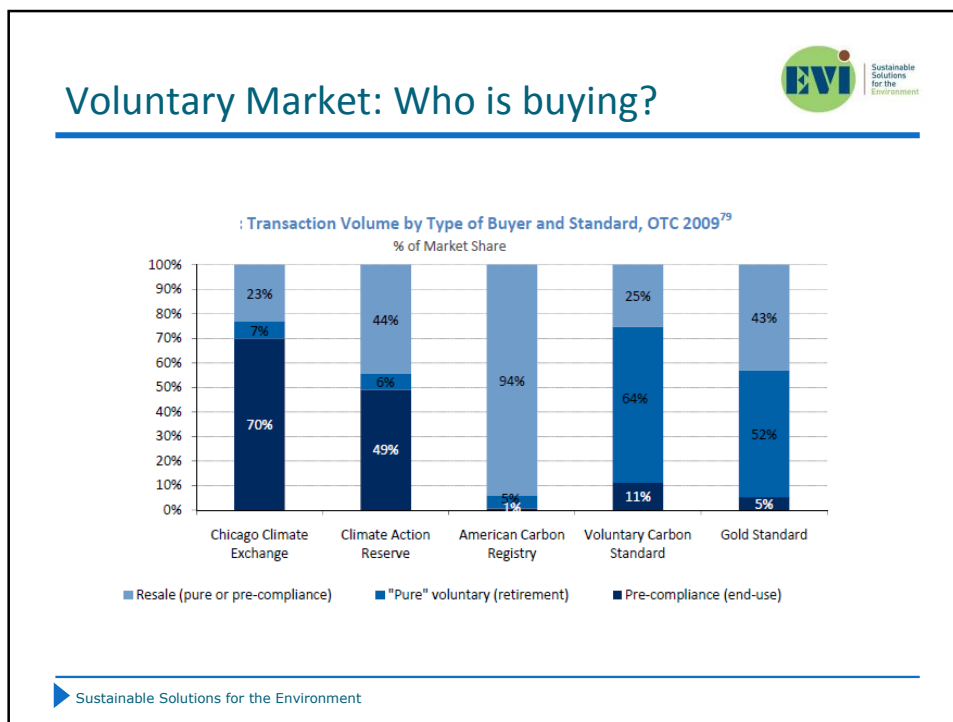
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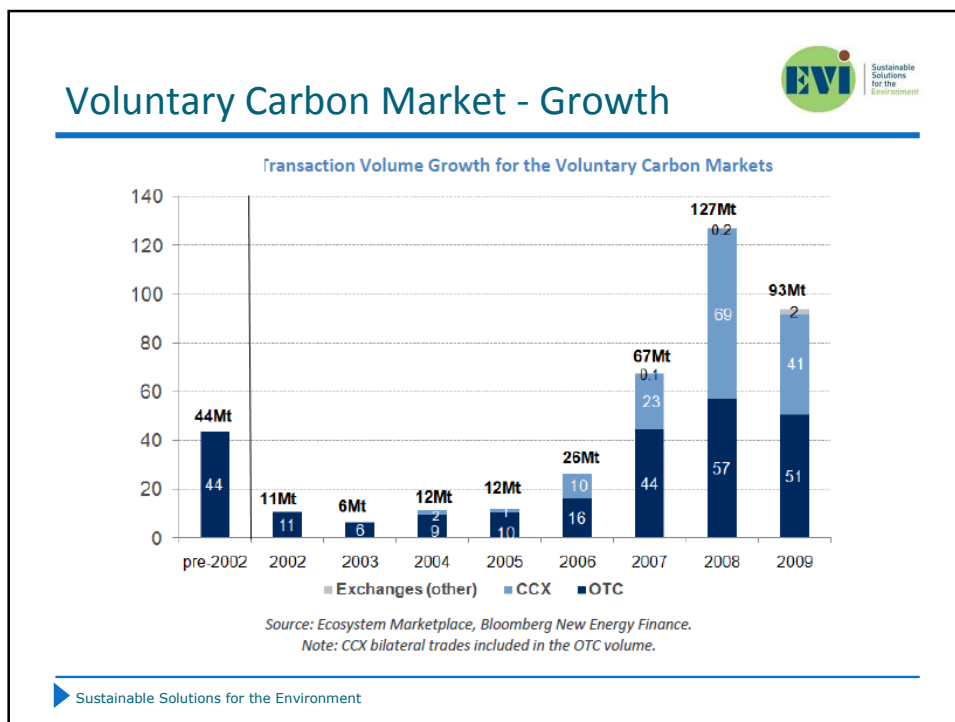
graph TD
    ICM[International Carbon Market] --> CM[Compliance Market]
    ICM --> VM[Voluntary Market]
    CM --> KT[Kyoto Type]
    CM --> NKT[Non Kyoto Type]
    KT --> KTB[Project Based]
    KT --> KTA[Allowance Based]
    KTB --> CDM
    KTB --> JI
    KTA --> IET
    NKT --> NKTB[Project Based]
    NKT --> NKTA[Allowance Based]
    NKTA --> EUETS
    NKTA --> RGGI
    VM --> LB[Legally Binding]
    VM --> NB[Non Binding]
    LB --> CCX[CCX Market]
    NB --> OTC[OTC Market]
    
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Carbon Market Structure

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Size of The Voluntary Market...

Markets	Volume (MtCO ₂ e)		Value (US\$ million)	
	2008	2009	2008	2009
Voluntary OTC	57	51	420	326
CCX	69	41	307	50
Other exchanges	0.2	2	2	12
Total Voluntary Markets	127	94	728	387
EU ETS	3,093	6,326	100,526	118,474
Primary CDM	404	211	6,511	2,678
Secondary CDM	1,072	1,055	26,277	17,543
Joint Implementation	25	26	367	354
Kyoto [AAU]	23	155	276	2,003
New South Wales	31	34	183	117
RGGI	62	813	241	2,667
Alberta's SGER	3	5	34	61
Total Regulated Markets	4,713	8,625	134,415	143,897
Total Global Markets	4,840	8,719	135,143	144,284

Source: Ecosystem Marketplace, Bloomberg New Energy Finance, World Bank.
Note: totals may not add up due to rounding.


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Why The Voluntary Market?

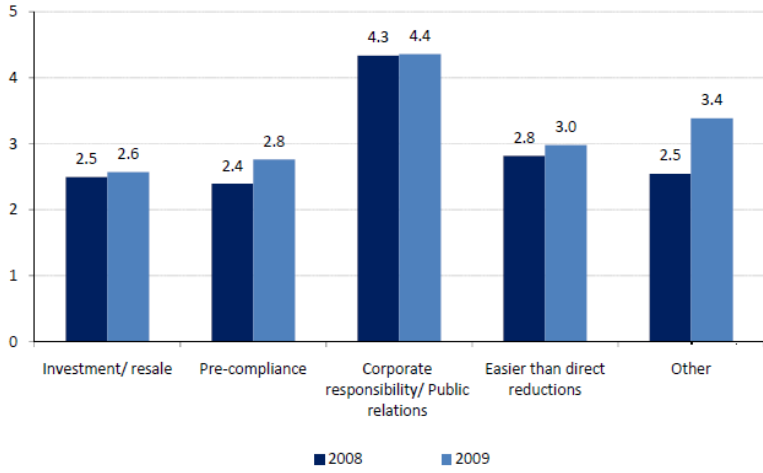
- ▶ Pre-compliance buying
- ▶ Carbon Neutrality & Going Green
 - ▶ Corporate Social Responsibility/Environment Ethics
 - ▶ Public relations/Branding
 - ▶ To improve shareholder value
 - ▶ Compulsion for being part of value chain (suppliers)
- ▶ Investment/Business Opportunity

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Buyer Motivations

Customer Motivations, OTC 2009
% of Market Share



Motivation	2008	2009
Investment/ resale	2.5	2.6
Pre-compliance	2.4	2.8
Corporate responsibility/ Public relations	4.3	4.4
Easier than direct reductions	2.8	3.0
Other	2.5	3.4

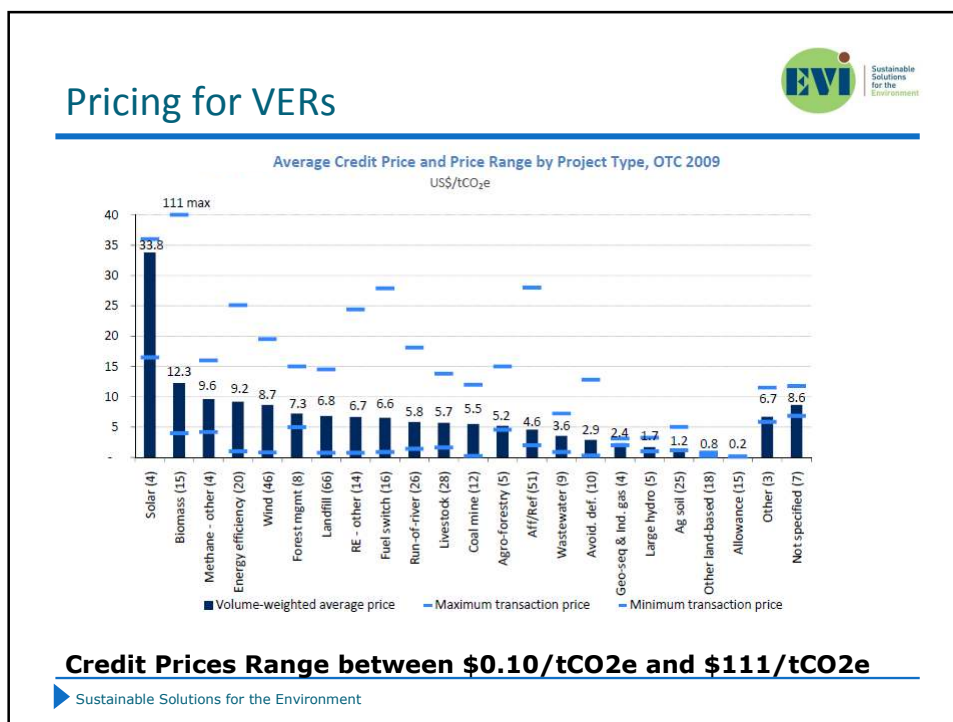
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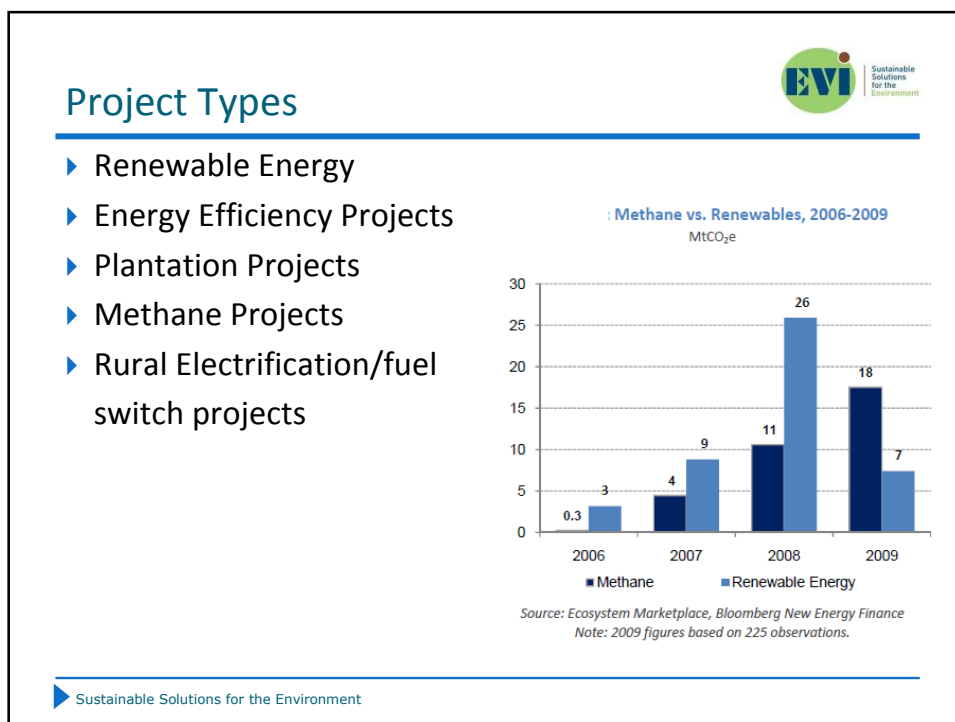
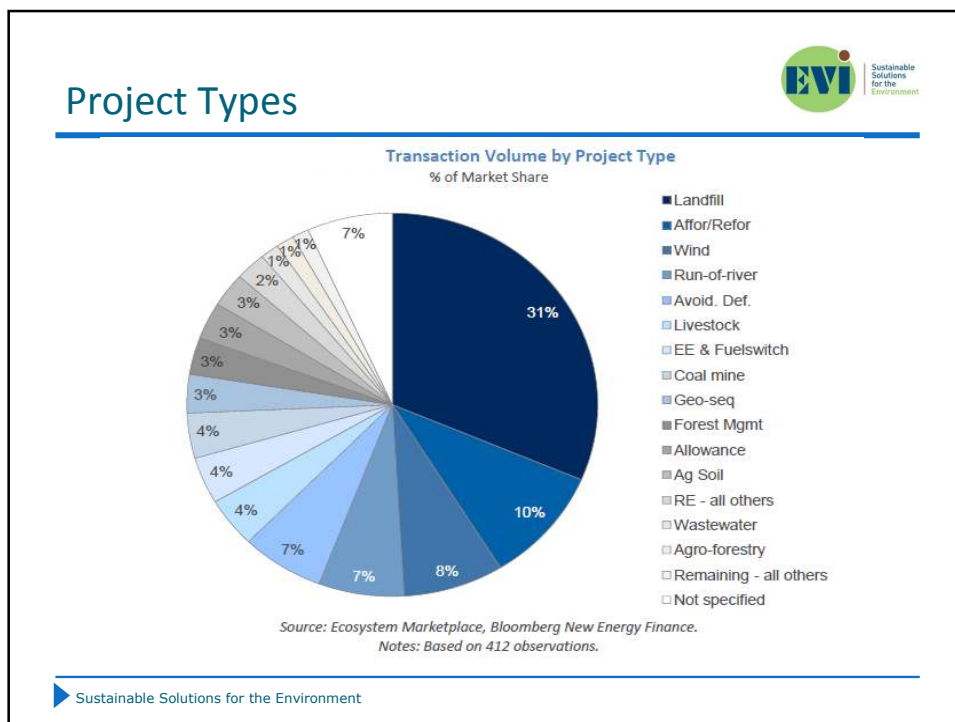
Carbon Neutrality and Going Green


Target Year	Company	Revenues (\$ millions)	Industry	Headquarters	Status
2000	Shaklee	34	Personal & home care	Pleasanton (CA)	Achieved
2005	HSBC	115,361	Banking/finance	London	Achieved
2006	Barclays UK	47,942	Banking	London	Achieved
	British Sky Broadcasting	7,534	Media	London	Achieved
	World Bank	4,783	International NGO	Washington (DC)	Achieved
	Avis Europe	1,512	Auto rental	Bracknell	Achieved
	FIFA World Cup	620	Sports	Zurich	Achieved
	BSI	467	Standards	London	Achieved
	Simmons & Simmons	449	Legal	London	Achieved
	Middlebury Coll. Ski Area	N/A	Ski area	Middlebury (VT)	Achieved
2007	Silverjet	N/A	Airlines	London	Achieved
	Bradford and Bingley	3,853	Financial services	Bingley, UK	Achieved
	Green Mountain Power	241	Electricity generation	Colchester (VT)	Achieved
	The Cliff House	N/A	Restaurant and grocer	San Francisco	Achieved
	Mosaic	N/A	Professional services	Cheverly (MD)	Achieved
	Salesforce.com	497	Professional services	San Francisco	Commitment
	Yakima	N/A	Recreation/sports	Beaverton (OR)	Commitment
	US Green Building Council	N/A	Construction/building	Washington (DC)	Commitment
2008	KPMG (Australia)	462	Accounting services	Sydney	Commitment
	NewsCorp	25,327	Media	New York	Commitment
	ST Microelectronics	9,854	Semiconductors	Geneva	Commitment
2010	Timberland	1,567	Apparel/Footwear	Stratham (NH)	Commitment
	Vancity	444	Banking (credit union)	Vancouver	Commitment
	Nike	14,955	Apparel/Footwear	Beaverton (OR)	Commitment
	Marks & Spencer	13,561	Retail	London	Commitment
2012	REI	1,022	Apparel/Footwear	Seattle	Commitment
	Interface, Inc.	1,076	Commercial Interiors	LaGrange (GA)	Commitment
(None)	KEEN	N/A	Apparel/Footwear	Portland	Interest
(None)	Miñon Footwear	N/A	Apparel/Footwear	Stratham	Interest

▶ Sustainable Solutions for the Environment Source: BSR Initiative



Credit Prices Range between \$0.10/tCO₂e and \$111/tCO₂e






Voluntary Carbon Market - Cycle

The entire process can be finished in less time period (3-4 months) compared to 1-2 yrs for CDM process. The process involves following steps:

- ▶ **Feasibility Study** - It includes analysis or assessment of the project emission reduction potential and other attributes by an advisor and preparation of Project Idea Note (PIN)
- ▶ **Preparation of Project Document (PD)** - The advisor prepares a PDD using various standards and available methodologies.
- ▶ **Validation** - The project is validated normally by the same Validators as for CDM such as DNV, SGS, TUV etc. to obtain a Validator’s certificate for the project .
- ▶ **Verification** - Verification is also done to by Verifiers (same as validators) to assess the quantum of credits to be issued to a project in any assessment period based on project monitoring report and site visits
- ▶ **Issuance** - Once, verification is done, issuance certificate is provided to the project.
- ▶ **Finding a Buyer** - It involves finding a suitable buyer with similar requirements for VERs to ensure good price and establishing emission reduction purchase agreement (ERPA)

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THANK YOU